

WARREN COUNTY HEALTH DEPARTMENT

2004 ENVIRONMENTAL HEALTH ASSESSMENT & IMPROVEMENT PLAN

INTRODUCTION

The Warren County Health Department (WCHD) has participated in the County Environmental Health Act (CEHA) program since 1985. The Act authorizes county health departments to function as agents of the State in conducting countywide environmental health activities to investigate citizen complaints, provide public education and enforce environmental statutes and regulations. State grants have been available to support CEHA activities.

The requirement that a CEHA grant application include a countywide environmental health assessment and improvement plan was adopted in July 2000 (N.J.A.C. 7:1H2.1(b)). The plan must identify county environmental health issues and propose a set of CEHA activities for the upcoming year.

DESCRIPTION OF AGENCY

The Warren County Health Department has provided comprehensive local public health services to the Warren County citizenry since 1970. State-mandated services are provided in the broad categories of Communicable Disease, Adult Health, Maternal and Child Health, Health Promotion, Medicare-certified Home Care, and Environmental Health. The Department is the authorized local health services agent for all twenty-two County municipalities. It has the strong support of elected county and municipal officials.

The Warren County Health Department has extensive experience in providing environmental health services according to NJDOH and NJDEP performance standards. The Environmental Health Division is the County Lead Agency for implementation of the County Environmental Health Act (CEHA), the Right-To-Know Act (RTK), the Local Information Network Communications System (LINCS) and the Bioterrorism Preparedness Grant Project.

The Environmental Health Division has 30 employees. In 2002, approximately one-third of its \$1.8 million annual budget was offset by grants and fees. The Division conducts about 16,000 environmental health activities annually.

The Department has sufficient staffing, training, equipment and stable funding to conduct a comprehensive countywide environmental health program based on current performance standards. The agency is committed to building the capacities and partnerships needed to implement a modern public health system envisioned in new State Public Health Practice Standards.

DESCRIPTION OF COUNTY

Warren County, located in northwestern New Jersey, occupies an area of 365 square miles, is 32 miles long with an average width of 13 miles, and ranks ninth in size among the State's 21 counties. Within the County is some of the most rugged and scenic terrain found in New Jersey. Mountain ranges and ridges that divide the county's fertile river valleys include Kittatinny Mountain, Jenny Jump Mountain, Scott's Mountain and Pohatcong Mountain. These fertile valleys have enabled the county to become an important agricultural district in the Garden State. Streams and rivers include the Musconetcong, Paulinskill and Pequest rivers; Dunnfield, Pohatcong and Lopatcong creeks; and Van Campens Brook. All empty into the Delaware River, a pristine major recreation resource.

The 2000 Census showed the County population to be 102,437. This was an increase of 11.7 percent over 1990. As a comparison, New Jersey's population increased 8.6 percent between 1990 and 2000. The County's Planning Department projects the population to rise to 116,437 in 2010 and 127,792 in 2020.

About a third of the population is clustered in the "urban" centers of Phillipsburg, Washington and Hackettstown. The County's population density of 286 persons per square mile is one of the lowest in the State.

The county operates under the freeholder form of county government. The Board of Chosen Freeholders consists of three Freeholders - Warren is the only remaining county to have a three-member board - each elected at large for staggered terms of three years. Reporting to the Board of Chosen Freeholders is an appointed County Administrator/Clerk of the Board who manages and supervises the day-to-day functions of the various County departments.

Among Warren County's greatest natural assets are clean air, clean water and open spaces for resident families, for visitor recreation, and for business and industry. With only slightly more than 10 percent of its area covered by urban development, Warren County offers a great deal in the way of outdoor recreation. Nearly 40,000 acres are prime forest, and more than 61,000 acres are termed forestland of statewide importance. Parks, forests and conservation lands within the County total nearly 38,000 acres and include Jenny Jump State Forrest, Stephens State Park, Allamuchy Mountain State Park, Worthington State Forest, Merrill Creek Environmental Resource Preserve, Pequest Trout Hatchery and Natural Resource Educational Center, and the Delaware Water Gap National Recreation Area. The County has a policy of open space and farmland preservation.

A public opinion survey by the County Planning Department showed that people in Warren County want controlled growth, land preservation and a clean environment.

AIR

GOAL: The air in Warren County will be healthful to breathe, and air pollutants will not damage our forests, land and water bodies.

STATUS

Air quality in Warren County has been a contentious public issue for many years. Emissions sources of concern have included the County garbage incinerator in Oxford, nearby power plants in PA, and large industrial facilities such as Roche Vitamins, Atlantic States Pipe and Oxford Textile. Most recently, the Roche plant in Belvidere was cited for a large solvent release not authorized in its state air permit.

The July 2000 HRSA report states that Warren County air met national standards for CO, NO_x, SO₂, ozone, particulates and lead. However, the southwest part of the County has been designated by NJDEP as a SO₂ non-attainment area since 1998. This may be related to emissions from the nearby Martins Creek, PA power plant which burns coal and oil. A proposal in late 2000 to expand the plant without upgrading existing control systems triggered a public outcry, formal protests by County officials and a legal appeal by the NJDEP. In May 2003, an agreement was reached in which NJDEP will withdraw its appeal, and the facility will burn lower sulfur coal, phase out its coal-fired units by 2007, and contribute \$100,000 to a Warren County air monitoring project.

The unauthorized Roche Vitamins release noted above resulted in a settlement agreement with NJDEP that provided for Roche funding of a Supplemental Environmental Project (SEP) for several air monitoring stations in the County and to support a Warren/Northampton PA Regional Air Quality Advisory Panel (AirQap). The AirQap is addressing air health impacts and evaluating the air monitoring station data. New monitoring stations were installed in late 2002 at the County Administration Building in White Township, at Belvidere High School and on Scotts Mountain in Harmony. Monitoring data collected through July 2003 did not show any measurements of SO₂ or PM-2.5 over health benchmarks. Also, of 59 volatile organic compounds (VOC's) measured at Belvidere and nearby Bangor PA, 5 VOC's exceeded their benchmarks for at least 1 sample. However, 4 of the VOC's routinely exceeded their benchmarks at other New Jersey monitoring sites and nationally, which indicates that the source of these 4 VOC's was not local.

The Roche solvent (VOC) release raised concerns about asthma in the Belvidere area. Environmental Commissions in Belvidere and White conducted surveys and concluded that local asthma rates were elevated. A well-controlled asthma incidence study is being conducted by researchers at the University of Medicine and Dentistry of New Jersey (UMDNJ).

Offensive odors from biosolids and industrial facilities have been a vexing source of complaints in Warren County for many years. Hundreds of odor complaints are received annually. Such releases continue to negatively impact Warren's environmental health and quality of life. The most frequent odor sources in 2003 have been the County landfill, the Natures Choice compost site and the Oxford Textile Plant.

2004 ACTIVITIES

- Investigate DEP referrals and citizen air pollution complaints of odors, particulates, open burning and truck idling fumes. Initiate enforcement action against State Air Code violators.
- Conduct State air permit compliance inspections of gas stations, dry cleaners, boilers and generators. Focus on facilities not having the required permit or whose permit has expired. Assess and collect penalties from noncompliant facilities.
- Continue to act against any proposals by upwind power plants or other emissions sources that would negatively impact Warren County's air quality.
- Participate in air monitoring and other County air quality issues by active membership in the Regional AirQap (www.airqap.com).

WATER

GOAL: Warren County streams & lakes will be fishable, swimmable and support healthy ecosystems. Surface and ground water will be clean sources of water. Every person in Warren County will have an adequate quantity of safe drinking water.

STATUS

1. Groundwater

All of Warren County's drinking water comes from wells. There are 25 Public Community Water Supply Systems in the County. NJDEP regulates these large systems. The WCHD oversees the County's 262 public noncommunity (PNC) water supply systems and approves new private wells. There are approximately 15,000 private wells in Warren County. About 40% of County households use private wells and septic systems, which can threaten groundwater and public health if improperly designed, constructed and maintained. Therefore, well and septic system management are top county environmental and public health priorities.

Groundwater quality in Warren County is generally good, but sporadic well contamination events do occur. Contaminants of greatest frequency and concern are fecal coliform bacteria, nitrates and volatile organic compounds (VOC's).

The Private Well Testing Act (PWTa) implemented in late 2002 is beginning to expand our knowledge of County groundwater quality. The Act requires extensive testing of wells serving properties being resold. Reports of PWTa tests that fail for fecal bacteria, nitrates and VOC's are investigated by the WCHD. In 2003, PWTa testing identified VOC well contamination clusters in Franklin, Greenwich, Lopatcong and White Townships. Also, a surprising number of PWTa well tests failing for lead have been reported. The lead is believed to originate from the plumbing system, because Warren County has no known naturally occurring lead in ground water. A study is needed to identify the exact source of lead found by these tests.

Underground fuel storage tanks (UST's) are a significant source of VOC ground water contamination in Warren County. UST contaminants of concern include benzene and MTBE. The NJDEP "Known Contaminated Sites in New Jersey" list contains approximately 50 Warren County locations with soil and/or groundwater contamination from leaking UST's. The WCHD is addressing this contamination source by conducting leak detection inspections at all Warren County UST facilities regulated by the NJDEP.

2. Surface Water

Surface water quality in Warren County is generally good - obvious signs of stream and lake pollution are uncommon. Not all County surface water bodies are pristine, however. The NJDEP's 2004 Proposed Sublist 5 identifies surface water stations having confirmed violations of surface water standards or suspected use impairments. The Warren County 2004 Proposed Sublist 5 contains 24 surface water stations considered impaired or threatened. All major County waterways are represented on the Sublist 5, including the Delaware, Paulinskill, Pohatcong, Pequest and Musconetcong Rivers. The non-attaining parameters identified at the Warren County stations include (in order of occurrence) fecal coliform, aquatic life, temperature, phosphorous, pH, suspended solids and various metals. The impairments are likely related more to diffuse sources than to point source discharges.

Several stream pollution incidents have occurred in the County concerning soil runoff and sedimentation from construction sites. Standard corrective procedures and technologies were not productive in controlling the pollution. Hopefully, the new Stormwater Management Rule will help control such sediment pollution more effectively.

2004 ACTIVITIES

- Investigate complaints concerning surface and groundwater contamination, abandoned wells, and failing septic systems. Take abatement action.
- Regulate new and altered septic systems: review plans, inspect installations, and issue certifications. Distribute septic care information to property owners.
- Regulate new and altered private and public noncommunity well systems: review plans, conduct inspections, review water test reports and issue certifications. Distribute well protection information to well owners.
- Inspect nontransient PNC systems every two years and transient systems every four years. Review the NJDEP public water database to identify systems that fail to sample as required. Take "zero tolerance" enforcement action against violators.

- Investigate private and PNC well contamination complaints. Take follow up action on well test reports of primary drinking water standard exceedances generated by the Private Well Testing Act.
- Conduct leak detection inspections of active NJDEP-regulated UST facilities every two years. Refer violations to DEP. Assist DEP in achieving compliance.
- Continue participation in the NJDEP migrant farm camp well sampling program. Collect and analyze samples for coliform bacteria and nitrates. Take follow-up action on exceedances found. Report results to NJDEP and USEPA.
- Continue to participate in the NJDEP ambient surface water network summer bacterial sampling. Collect 5 samples over a 30-day period at each designated sampling station. Deliver samples to the NJDHSS courier for transport to the State lab.

SOLID WASTE

GOAL: Solid Waste in Warren County will be managed in a safe and environmentally sound manner.

STATUS

Warren County's major solid waste issues in 2003 have involved the County landfill's capacity and its health impacts, particularly on air quality. Since wasteflow deregulation, waste deliveries to the landfill have increased in order to generate revenue sufficient for debt payments and closure costs. A pending Solid Waste Plan amendment calls for the landfill to reach capacity and close in 2007. Thereafter, the free market will presumably determine where and how the County's solid waste, including ash from the garbage incinerator, will be managed. Since the current operator (Covanta) of the incinerator is in bankruptcy, that facility's future viability is uncertain.

Landfill gas odors were a significant problem in 2003. The odors impacted many neighboring residents and occupants of a nearby elementary school. Over 100 complaints were received during the year, resulting in near evacuation of the school and issuance of citations against the landfill for violations of the State Air Code. The landfill owner has installed tarping and a gas control system, which appear to be somewhat effective in reducing odors. Concerns have been raised that the high proportion of putrescible waste going to the landfill will exacerbate the odor problem. The Nature's Choice compost facility, also in White Township, was another significant source of odor complaints in 2003.

Warren County's recycling appears to need improvement. The State recycling rate target is 65%. The New Jersey 2001 recycling rate reported by NJDEP is 54.2%. Warren County's 2001 recycling rate was 33.5%, the lowest among New Jersey counties. This statistic is of concern, since recycling has presumed environmental health benefits not being fully realized in the County. However, the low rate figure may be explained, at least in part, by poor municipal reporting and/or inconsistency among counties in the rate calculation method. The County Recycling Coordinator is assembling the complete figures needed to determine a more accurate County recycling rate.

Environmental compliance monitoring of the various facilities that handle Warren County's solid waste is conducted by the NJDEP & WCHD. Warren's two major solid waste facilities, the County landfill and garbage incinerator, are monitored primarily by NJDEP. Other facility types that receive routine inspections include minor and closed landfills, compost sites, recycling centers, leaf mulching sites, DPW sites, wood processing facilities and scrap tire storage sites. The compliance status of these facilities is generally good. However, some sites have ongoing odor problems, not all scrap tires sites have come into full compliance, and several closed landfills remain on the NJDEP Known Contaminated Sites List. Also, the County has some sludge processing quasi-solid waste sites with unresolved air, noise or surface runoff pollution issues. Finally, solid waste hauler regulation activities will continue to be conducted by the Pollution Control Financing Authority (PCFA), the WCHD's subcontractor and partner in solid waste control.

2004 ACTIVITIES

- Investigate all complaints from citizens and NJDEP concerning improper operation of solid waste facilities, illegal dumping, unpermitted facilities and sludge handling.
- Conduct compliance monitoring inspections of minor landfills, recycling (including exempt) facilities, scrap tire sites, and leaf mulching sites. Inspect major and compost facilities jointly with NJDEP.
- Through PCFA, monitor solid waste haulers for compliance with NJDEP regulations and the Solid Waste Management Plan. Interview transporters seeking A-901 exemption. Inspect vehicle loads for permitted waste type.

HAZMAT EMERGENCY RESPONSE

GOAL: Warren County will be free from unacceptable human health and ecological risks due to exposure from hazardous substances and other harmful agents.

STATUS

The Warren County Health Department responds to approximately 50 hazmat incidents annually. Because large incidents have been infrequent, we have maintained a relatively basic response capability and referred major incidents to NJDEP. However, the events of September 11, the subsequent anthrax attacks and ongoing Weapons of Mass Destruction (WMD) threats have placed a new urgency on preparedness for response to a full range of harmful agents. Accordingly, the WCHD has strengthened its emergency response partnership with the County Office of Emergency Management (OEM) in a coordinated effort to improve response effectiveness. The expanded activities are being conducted under guidance of the Warren County Hazmat Task Force, which has for several years been a great asset in giving direction to the County on matters concerning hazmat response.

Warren County has a number of locations vulnerable to accidental or intentional hazmat releases. Interstate highways and rail lines that pass through the County and connect to the Metropolitan area are a major potential source of hazmat incidents. Other vulnerable County sites include several large chemical manufacturing plants and two power plants on the western border. Also, a potential target is the Warren County Public Safety Building, which is designated and equipped as the Governor's Alternate Emergency Operations Center should the State's primary command center not be available.

The formation of a County Hazmat Team is an idea whose time has come. Right now, no team in Warren County can respond to events that involve major hazmat spills or intentional releases of chemical, biological, radiological or nuclear (CBRN) agents. The County should not be dependent on State response that could take hours.

The resources needed to support a Hazmat Team are formidable. Team members must be insured, trained and drilled, placed on medical monitoring, outfitted with protective and decontamination equipment, and provided with detection instruments, communications equipment and dedicated response vehicles. Secure facilities are required to store the Team's large and varied cache of equipment and supplies.

Also, a qualified Hazmat Program Coordinator would be needed to oversee all team activities, coordinate with other agencies, be custodian of equipment and records, and manage the program budget. Federal and State grants would fund most program costs. We hope to have an operational Team by mid 2004.

2004 ACTIVITIES

- Respond to all hazardous materials emergencies referred by NJDEP. Coordinate response action with appropriate federal, state and local agencies.
- Investigate hazmat complaints received from citizens and NJDEP. Refer cases requiring significant remedial action to NJDEP.
- Ensure that personnel assigned to hazmat response are properly trained and participating in a medical surveillance program.
- Establish a fully-trained and equipped County Hazmat Team also capable of response to CBRN incidents. Form the team under guidance of The Hazmat Task Force and in close cooperation with the County OEM.

OTHER

Other County environmental health issues that warrant mention are Noise, Pesticides and Radon.

Noise complaints in Warren County have been sporadic. However, such complaints are among the most challenging to evaluate and difficult to resolve. The WCHD will ensure that the sound level measuring instruments and trained personnel necessary to provide a basic noise investigation capability are available when the need arises.

Pesticides are examples of hazardous substances intentionally and legally released into the environment. When properly used and handled the benefits of pesticides presumably outweigh their risks. The WCHD addresses pesticide control by promoting Integrated Pest Management (IPM) practices that specify minimum use of pesticides. Also, we will continue to conduct inspections for pest control licensure and application practices by landscapers and in other setting where pesticides are applied, namely schools, golf courses, campgrounds, apartments and restaurants.

Radon. Exposure to naturally occurring radon gas is a significant public health risk in Warren County. The entire County is located in "Tier 1", a designation that carries the highest potential for elevated levels of indoor radon. NJDEP estimates that 50% of the County population is potentially exposed to indoor radon above the 4pCi/L action level, and that the average indoor radon concentration exceeds the action level in all County municipalities. USEPA data show that the risk of getting lung cancer from lifetime radon exposure at the 4pCi/L action level is 2 lung cancers/1000 persons for nonsmokers and 29 lung cancers/1000 persons for smokers. The WCHD will address radon by providing public education on minimizing radon risk. Also, we will participate in the NJDEP Elevated Radon Awareness Program by distributing radon test kits in municipalities found to have homes with radon levels above 100 pCi/L.

OPEN AND EFFECTIVE GOVERNMENT

Finally, the WCHD will strive to achieve its goals through the involvement of citizens and stakeholders as critical partners, and through a commitment to continuous improvement of its operations. We will:

- Maintain open, effective communications and strategic partnerships with State officials, County officials, health agencies, nonprofit organizations, the media, the business community and any other party having interest in environmental and public health.
- Respond promptly and efficiently to complaints, health information requests, and records (OPRA) requests from the public.
- Establish a Governmental Public Health Partnership (GPHP) Work Group composed of municipal representatives. The GPHP will support and guide the WCHD in planning and implementing environmental and public health services in Warren County.